

Form C-104
Rev. 9/02

CONSTRUCTION VALUE ENGINEERING CONCEPT PROPOSAL
MISSOURI DEPARTMENT OF TRANSPORTATION

Date 03-21-08

Contract ID 070525-403

Job No. J4I1331

County Clay Route I-435

Original Bid Cost \$5,596,703.69

Contractor Chester Bross Construction Company

By Dan Buckman

Designed By Dan Buckman

Phone 573-221-5958

VECP 08-49

1. Description of existing requirements and proposed change(s). Advantages/Disadvantages
See Attached, Advantages Substantial Cost Savings.

2. Estimate of reduction in construction costs. \$1,057,151.25

3. Prediction of any effects the proposed change(s) will have on other department costs, such as maintenance and operations.

No compromising, little if any, in pavement quality and service life. No significant increase in Maintenance costs anticipated.

4. Anticipated date for submittal of detailed change(s) of items required by Section 104.6 of the Specifications.

3-24-08

(date)

5. Deadline for issuing a change order to obtain maximum cost reduction, noting the effect of contract completion time or delivery schedule.

3/28/08

(date)

Completion date remains the same

(effect)

6. Dates of any previous or concurrent submission of the same proposal.

None

(date and/or dates)

Existing Requirments

SP125 SMA	29,629 @ \$74.70	\$2,213,286.30
SP190 B	33,885 @ \$56.15	\$1,902,642.75
BP-1	14,452 @ \$36.20	\$523,162.40
BP-2	9,654 @ \$38.45	\$371,196.30
Tack	20,890 @ \$0.75	<u>\$15,667.50</u>
		\$5,025,955.25

Proposed Change #2

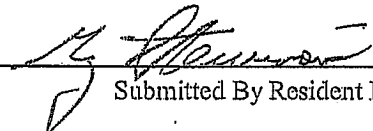
SP-190B 2"	33,885 @ \$56.15	- \$1,902,642.75
Ultrathin Bonded	296,811 @ \$4.78	- \$1,418,756.50
Wearing Surface, Type C		
BP-1 2 3/4"	17,677 @ \$36.20	- \$639,904.82
Tack	10,000 @ \$0.75	<u>- \$7,500.00</u>
Estimated Reduction in Construction Costs		\$1,057,151.25

Additional Comments:

**** Portion Below This Line To Be Filled Out by MoDOT ****

Comments: Proposal # 2

See pavement location and existing pavement type from proposal # 1. I would recommend this proposal # 2. We will have the structure of the 2 inches of SP190 capped with UBAWS. We would underrun an 1 3/4" BP-2 on the shoulders. I would recommend empirical data be looked at for pavement substitutions by our pavement specialist. Also I think there should be a discussion whether this is ATC or a VE. We would be sacrificing smoothness for substantial savings.

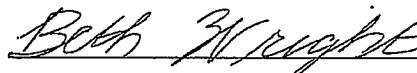

Submitted By Resident Engineer

3-24-08
Date

Comments:

SEE ATTACHED MEMO

☒ Approval
Recommended
☐ Rejection
Recommended


District Engineer

3/26/08
Date

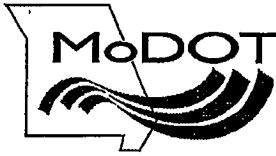
Comments:

☐ Approval
☐ Rejection

State Operations Engineer

Date

Distribution: Resident Engineer, District Operations Engineer, State Operations Engineer
*Value Engineering Administrator - *MoDOT, P.O. Box 270, Jefferson City, MO 65102



MEMORANDUM

Missouri Department of Transportation

D4 - Administration

TO: Dave Ahlvers-cs

CC: Dennis Bryant-cs
Tom Allen-de

FROM: Beth Wright-D4ao
District Engineer *Beth Wright*

DATE: March 25, 2008

SUBJECT: I-435, Clay Ct.
Job No. J4I1331 & J4I1332
Value Engineering Proposal – Chester Bross Construction

The reason for this correspondence is to provide the formal District response to the value-engineering proposal submitted on the above referenced project. Our position and recommendations is as follows:

1. Concurrent with our Resident Engineers response to VE Proposal #1, complete elimination of the asphalt base and surface in lieu of UBAWS is not acceptable. We believe the pavement structure and condition preclude the elimination of the SP 190 base course asphalt. Additionally, the shoulder condition precludes the elimination of the asphalt resurfacing as provided in the original plan.
2. Concurrent with our Resident Engineers response on VE Proposal #2, the use of UBAWS in lieu of the surface asphalt (125 SMA) and the cross section reduction of 1" of asphalt on the entirety of the shoulders are acceptable. Additionally, we concur with the Resident Engineers evaluation of the VE. Due to the loss of pavement structure provided by the 1¾" of 125 SMA we believe the proposal to be a Practical Design VE. This designation of Value Engineering is split on a 75% owner / 25% contractor basis.

Additionally, we would need to address the smoothness requirements. The current two lift construction method engages section 403.20.2 Profilographing specification. This Value Engineering proposal does not address the issue of the smoothness requirements that may or may not be applied in this situation. The District is not willing to sacrifice ride quality or accept a substantial amount of marred surface. The issues of smoothness will need to be addressed as part of the SP 190 lift to assure a quality ride in the UBAWS. If practical, we recommend the application of section 502 to the SP 190 lift prior to the UBAWS and apply section 403.20.1 to the surface lift.

Upon consideration of this proposal, if you have any questions or require additional clarification please do not hesitate to call the DCME, Perry Allen, at 816-622-6340.

CHESTER BROSS CONSTRUCTION COMPANY



P.O. Box 430
Hannibal, MO 63401

Chester Bross, President
"Equal Opportunity Employer"

Ph: 573-221-5958
Fax: 573-221-1892

March 21, 2008

Mr. Gregory Stervinou
MODOT
1900 NW Cookingham Drive
Kansas City, MO 64155

RE: Job No. J411331 & J411332
Rt. 435 - Clay County

Dear Mr. Stervinou:

The attached Value Engineering Proposals with supporting documentation are for your review and consideration. We have proposed two (2) separate scenarios with substantial savings involved with both.

It shall be understood these are Value Engineering Proposals with MoDOT and Chester Bross Construction Company sharing in the savings on a 50/50 basis.

Both proposals are based on oil prices at the time the 1331 job was bid in May of 2007. They are conditional on the index applying to both Nova Chip and asphalt mixes.

We hope you realize the utmost importance of a very early and quick review with decision to be made within the next week as we have material being made for the project as originally bid.

We would appreciate your earliest concurrence to either proposal.

If you have any questions, please contact me at (573) 221-5958.

Sincerely,

Daniel Buckman
Project Manager

VALUE ENGINEERING CHECK SHEET

TYPE OF WORK

(Check one that applies)

- ☐ Bridge/Structure/Footings
- ☐ Drainage Structures (RCP, RCB, CMP's, ect.)
- ☐ TCP/MOT
- ☒ Paving (PCCP, ect.)
- ☐ Grading/MSE Walls
- ☐ Signal/Lighting/ITS
- ☐ Misc. _____

SUMMARY OF PROPOSAL

(If needed, condense summary to a couple of lines)

____ Substitute UBAWS for SP 125 SMA on the final surface

SCANNING OF DOCUMENT

If the proposal is large, please mark or make note, which pages need to be scanned into the database. If there are special instructions, make note of them here.

____ Proposal is not lengthy.
